IN THE CLAIMS

1. (Previously Presented) Apparatus for controlling the flow of a gas between a process region and an exhaust port in a semiconductor substrate processing chamber, comprising:

at least one restrictor plate supported within the semiconductor processing chamber by a plurality of support pins and adapted to at least partially circumscribe a substrate support pedestal, the restrictor plate adapted to control the flow of at least one gas flowing between the process region and the exhaust port.

2. (Previously Presented) The apparatus of claim 1, further comprising:

a base adapted to be coupled to a bottom of the processing chamber; and

a support ring coupled to the base via the plurality of support pins in a vertically spaced apart orientation, wherein the at least one restrictor plate is coupled to the support ring.

3. (Previously Presented) The apparatus of claim 2, wherein the at least one restrictor plate is configured to be laterally spaced apart from the substrate support pedestal and an interior wall of the processing chamber.

4. (Cancelled)

5. (Previously Presented) The apparatus of claim 3, wherein the support pins retain the supporting ring in a non-parallel orientation with respect to a plane defined by a substrate support surface of the substrate support pedestal.

6. (Previously Presented) The apparatus of claim 1, wherein the at least one restrictor plate is one restrictor plate having an annular shape which at least partially circumscribes the substrate support pedestal.

7. (Previously Presented) The apparatus of claim 6, wherein the restrictor plate has a width that is wider at one portion of the restrictor plate than at another portion of the restrictor plate.

8. (Original) The apparatus of claim 7, wherein the portion having the wider width is adapted for positioning proximate the exhaust port.

9. (Original) The apparatus of claim 1, wherein the at least one restrictor plate further comprises a plurality of restrictor plates, wherein each restrictor plate abuts at least one other restrictor plate.

10. (Previously Presented) A semiconductor substrate processing system, comprising:

a processing chamber;

a substrate support pedestal disposed in the chamber;

a gas inlet formed in the chamber above the pedestal for supplying a process gas into a process region above the support pedestal;

an exhaust port formed in a wall of the chamber; and

at least one restrictor plate supported within the processing chamber by a plurality of support pins and at least partially circumscribing the substrate support pedestal, the restrictor plate adapted to control the flow of at least one gas flowing between the process region and the exhaust port.

11. (Previously Presented) The system of claim 10, further comprising:

a base adapted to be coupled to a bottom of the processing chamber; and

a support ring coupled to the base via the plurality of support pins in a vertically spaced apart orientation, wherein the at least one restrictor plate is coupled to the support ring.

12. (Cancelled)

13. (Previously Presented) The system of claim 11 wherein the support pins retain the supporting ring non-parallel with respect to a plane defined by a substrate support surface of the substrate support pedestal.

14. (Original) The system of claim 10, wherein the at least one restrictor plate is a plurality of restrictor plates having an arcuate shape.

15. (Original) The system of claim 14, wherein the plurality of restrictor plates substantially surround the substrate support pedestal.

16. (Previously Presented) The system of claim 15, wherein at least a portion of an outer edge of the plurality of restrictor plates reduces a gap defined between the outer edge and an inner wall of the chamber proximate the exhaust port.

17. (Cancelled)

18. (Previously Presented) The system of claim 10, wherein the one restrictor plate has an annular shape which substantially surrounds the substrate support pedestal.

19. (Original) The system of claim 18, wherein the one restrictor plate has a width that is wider at one portion of the one restrictor plate than at another portion of the one restrictor plate.

20. (Previously Presented) The system of claim 19, wherein the portion having the wider width is positioned proximate the exhaust port.

21. (Previously Presented) The system of claim 20, wherein at least a portion of an outer edge of the one restrictor plate reduces a gap defined between the outer edge and an inner wall of the chamber along one section proximate the exhaust port.

22. (Previously Presented) The system of claim 10, wherein the at least one restrictor plate is one restrictor plate having an annular shape which completely surrounds the substrate support pedestal and a width that is wider at one portion of the one restrictor plate than at another portion of the one restrictor plate, and wherein a portion of an outer edge of the one restrictor plate contacts an inner wall of the chamber at least in a location proximate the exhaust port.

23. (Currently Amended) A semiconductor substrate processing system, comprising:

a processing chamber;

a substrate support pedestal disposed in the processing chamber;

a gas inlet formed in the chamber above the pedestal for supplying a process gas into a process region above the support pedestal;

an exhaust port formed in a wall of the processing chamber; and

a restrictor plate supported within the processing chamber in a laterally space-apart relation relative to the substrate support pedestal and sidewalls of the processing chamber, wherein a first predetermined gap is between the substrate support pedestal and the restrictor plate, and a second predetermined gap is between the restrictor plate and the sidewalls of the processing chamber, and wherein the restrictor plate at least partially circumscribes the substrate support pedestal and is adapted to control the flow of at least one gas flowing between the process region and the exhaust port <u>through the gaps</u>.

24. (Previously Presented) The system of claim 23, wherein the restrictor plate further comprises a plurality of removable arc segments.

25. (Previously Presented) The system of claim 23 further comprising:

a plurality of support pins coupling the restrictor plate to a bottom of the processing chamber.

26. (Previously Presented) The apparatus of claim 1, wherein a length of the support pins is adjustable.

27. (Previously Presented) The apparatus of claim 1, wherein the restrictor plate has an oval profile.

28. (Previously Presented) A semiconductor substrate processing system, comprising:

a processing chamber;

a substrate support pedestal disposed in the processing chamber;

a gas inlet formed in the processing chamber above the pedestal for supplying a process gas into a process region defined in the processing chamber above the support pedestal;

an exhaust port formed in a wall of the processing chamber;

a restrictor plate supported within the processing chamber in a laterally space-apart relation relative to the support pedestal and sidewalls of the processing chamber, the restrictor plate at least partially circumscribing the substrate support pedestal and positioned above the exhaust port; and

a plurality of pins extending between the restrictor plate and a bottom of the processing chamber.

29. (Previously Presented) The apparatus of claim 1, wherein:

the at least one restrictor plate is supported within the processing chamber in a laterally space-apart relation relative to the substrate support pedestal and sidewalls of the processing chamber; and

a first predetermined gap is between the substrate support pedestal and the restrictor plate, and a second predetermined gap is between the restrictor plate and the sidewalls of the processing chamber.

30. (Previously Presented) The system of claim 10, wherein:

the at least one restrictor plate is supported within the processing chamber in a laterally space-apart relation relative to the substrate support pedestal and sidewalls of the processing chamber; and

a first predetermined gap is between the substrate support pedestal and the restrictor plate, and a second predetermined gap is between the restrictor plate and the sidewalls of the processing chamber.